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APPLICATION N	10.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/050,538	01/18/2002		Kenneth J. Myers	MYKE009/BEU	2172	
23364	7590	03/23/2005		EXAMINER		
		MAS, PLLC	LE,	LE, VU		
625 SLA FOURTH				ART UNIT	PAPER NUMBER	
ALEXAN	NDRIA,	VA 22314	2613			
				DATE MAILED: 03/23/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

				XXIII				
	Applicat	tion No.	Applicant(s)	40.4				
	10/050,	538	MYERS, KENNETH J.					
Office Action Summary	Examine	er	Art Unit					
	Vu Le		2613					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOTHE MAILING DATE OF THIS COMM  - Extensions of time may be available under the proving after SIX (6) MONTHS from the mailing date of this  - If the period for reply specified above, the maxim  - Failure to reply within the set or extended period for Any reply received by the Office later than three moderned patent term adjustment. See 37 CFR 1.704	IUNICATION. isions of 37 CFR 1.136(a). In no ecommunication. irty (30) days, a reply within the stum statutory period will apply and reply will, by statute, cause the aphths after the mailing date of this control.	event, however, may a re latutory minimum of thirty will expire SIX (6) MONT pplication to become ABA	ply be timely filed  (30) days will be considered timely  (HS from the mailing date of this co	<i>i.</i> ommunication.				
Status								
1) Responsive to communication(s	) filed on		•					
2a)  This action is FINAL.	2b)⊠ This action is	non-final.						
3) Since this application is in condi	tion for allowance excep	ot for formal matte	ers, prosecution as to the	merits is				
closed in accordance with the pr	ractice under <i>Ex parte</i> C	<i>luayl</i> e, 1935 C.D.	. 11, 453 O.G. 213.					
Disposition of Claims								
4) Claim(s) 1-20 is/are pending in t	the application.							
4a) Of the above claim(s)	is/are withdrawn from o	onsideration.						
5) Claim(s) is/are allowed.		•						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.								
7) Claim(s) is/are objected t	Claim(s) is/are objected to.							
8) Claim(s) are subject to re	estriction and/or election	requirement.						
Application Papers								
9)☐ The specification is objected to b	y the Examiner.							
10)⊠ The drawing(s) filed on 18 Janua	<u>ary 2002</u> is/are: a)□ ac	cepted or b) d	ojected to by the Examin	er.				
Applicant may not request that any	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) inclu	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is object	ed to by the Examiner. I	Note the attached	Office Action or form PT	O-152.				
Priority under 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Address manufactures	•							
Attachment(s)  1) Notice of References Cited (PTO-892)		4) Interview S	ummary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review		Paper No(s	)/Mail Date	_				
3) Information Disclosure Statement(s) (PTO-14-Paper No(s)/Mail Date <u>5/02</u> .	49 or PTO/SB/08)	5)	formal Patent Application (PTC 	D-152)				

Art Unit: 2613

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 10, 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. Claim 10, line 3, "a visible/slash composite image" is indefinite. Is it a "visible composite image"? Please remove "slash".
  - b. Claim 18-20, "said second light source" has no antecedent basis.
  - c. Claim 20 is believed to have the wrong claim dependency. Claim 6 is a system claim. For purpose of art rejection, claim 20 is presumed dependent upon claim 18.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2613

4. Claims 1-11, 15-20 are rejected under 35 U.S.C. 102(a) or (e) as being by anticipated by Ono, US 2001/0021011.

Re claim 1, Ono discloses a system for capturing images and data related to a subject (fig. 3) in a format that facilitates interpretation of the images and data by a human viewer or processing by a computer or other electronic processing device (fig. 4), wherein the subject emits or reflects a specific radiation pattern or signature within a predetermined range of frequencies (fig. 3, para 0079 – 0080; In Ono, different wavelength components qualify as a specific radiation pattern or signature as claimed), comprising: at least one frequency discriminator including at least one beam splitter arranged to optically separate the received image of the emitted or reflected pattern or signature from a composite image of the subject (fig. 3: 30, para 0080).

Re claim 2, a system as claimed in claim 1, further comprising at least one pattern-less illumination source (fig. 3: 10A, 10B; In Ono, light sources 10A,10B are "pattern-less" illumination source), wherein said specific radiation pattern or signature results from reflection of radiation emitted by said illumination source at frequencies (fig. 3: 12A, 12B; In Ono, optical filters 12A,12B serve to cause light sources 10A,10B to transmit light at specific wavelength i.e., pattern or signature as claimed).

Re claim 3, a system as claimed in claim 1, wherein said specific radiation pattern or signature is a radiation signature emitted by the subject, and wherein said system comprises at least two said discriminators (fig. 3, para 0079-0080; In Ono, the prism 30 is actually a combination of three wavelength discriminators. The object 2 emits light at different wavelengths).

Art Unit: 2613

Claim 4 has been analyzed and rejected w/r to claim 1-3.

Re claim 5, the system as claimed in claim 4, wherein said light having a first range of frequencies is infrared light and said composite image includes reflections in said first range of frequencies and visible light reflections. (fig. 20, see para 0119 – 0120 "third embodiment").

Re claim 6, a system as claimed in claim 4, further comprising a second light source, said second light source being arranged to project light onto said subject from a different angle than said first light source. (See fig. 23).

Re claim 7, a system as claimed in claim 6, wherein said second light source has a same frequency range as said first light source. (See fig. 3, para 0079 – 0080; In Ono, the light sources 10A,10B are the same. The optical filters 12A,12B dictate the illumination wavelengths).

Re claim 8, a system as claimed in claim 6, wherein said second light source has a different frequency range than said first light source. (See fig. 20).

Re claim 9, a system as claimed in claim 4, wherein said receiver includes a pair of beam splitters. (See fig. 3, para 0079-0080; In Ono, the prism 30 is actually a combination of three wavelength discriminators or beam splitters to split the reflected light into three light beams).

Re claim 10, a system as claimed in claim 9, wherein said receiver includes a third beam splitter for separating a full infrared image from a visible/slash composite image of the subject. (See fig. 20; In Ono, the prism 30 is actually a combination of

Art Unit: 2613

three wavelength discriminators or beam splitters to split the reflected light into three light beams i.e. infrared light and visible light).

Re claim 11, a system as claimed in claim 4, further comprising a range-finding device arranged to determine a distance from said receiver or light source to said subject. (See figs. 4-5, para 0081 – 0087).

Claims 15-20 have been analyzed and rejected w/r to claims 1-11. Ono discloses both the system and method.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono.

Re claims 12-14, Ono fails to disclose fiber optic coupling between the subject and receiver, and between the light source and subject as claimed. However, Official Notice is taken to note that fiber optic is notoriously well known and used in the art as an alternative optical coupler. It would have been obvious to use fiber optic as an optical coupler in Ono for the benefit of waveguide capability.

Application/Control Number: 10/050,538 Page 6

Art Unit: 2613

### Contact

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is (571) 272-7332. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-7332.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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